



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 28, 2009

Mary S. Adams
Central Coast Ambient Monitoring Program
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Dear Ms. Adams:

Thank you for the opportunity to comment on the Central Coast Regional Board's draft 2008 Clean Water Act Section 303d list. EPA commends Regional Board staff for their considerable effort to assemble and evaluate available water quality-related data and information. We carefully reviewed the draft listing decisions and supporting documentation. This letter summarizes our support for certain assessment methodologies as well as our remaining concern about assessment determinations for beach pathogens.

A. Nitrate/nutrient assessments

We support Regional Board staff assessment decisions to list waters as impaired based on nutrient numeric guidelines; e.g., nitrate Tembladero Slough, Alisal Slough, Old Salinas River and Watsonville Creek. Federal regulations require States to assess waters in comparison to both narrative and numeric water quality standards. Here the narrative objective for biostimulatory substances has been interpreted via application of the Nutrient Numeric Endpoint (NNE) model. The NNE model is technically sound, has been peer reviewed and applied to develop TMDLs in various nutrient impaired State waters, such as Clear Lake and Machado Lake. The nitrate assessment guideline values are reasonable and appropriately defined based on local water quality conditions. This assessment methodology is consistent with a proposal by State Board staff in May 2007 for evaluating nutrients in surface waters for 303d listing decisions, whereby other parameters, such as dissolved oxygen, chlorophyll and biomass are included.

B. Temperature assessments

The Central Coast Basin Plan does not currently have numeric water quality objectives for temperature, and staff have utilized an evaluation guideline of 21.0°C for protection of cold freshwater aquatic life, based on the optimal temperature for support of juvenile trout. We support staff assessment decisions based on this guideline to identify impaired waters such as Arroyo Seco, Llagas and Uvas Creek and Santa Ynez River. This listing is based on an analysis

of available data, which consists primarily of monthly grab samples for temperature. We recommend revising monitoring programs to provide more specific data for TMDL development. For example, include continuous monitoring during critical periods (e.g., July) or critical locations (e.g., those waterbodies that currently or potentially support productive trout habitat), and analyze data such that it can also represent the durations of high temperatures (e.g., maximum 7-day running average temperatures). Moreover, we recommend development and adoption of specific temperature numeric water quality objectives for protection of both cold water and warm water species.

C. Turbidity assessments

The Central Coast Basin Plan does not currently have numeric water quality objectives for turbidity; and staff utilized an evaluation guideline of 25 NTU, based on the maximum level to protect feeding stages of juvenile trout. We support staff assessment decisions to list waters for elevated turbidity based on this guideline, which is protective of the most sensitive beneficial use. This listing is based on an analysis of available data, which consists primarily of monthly grab samples for turbidity. We recommend revising monitoring programs to provide more specific data for TMDL development. For example, we recommend continuous and/or focused monitoring during critical periods (e.g., through storm periods where turbidity is associated with elevated suspended sediment concentrations), and to prioritize efforts toward protecting waterbodies that currently or potentially support productive trout habitat such as the Arroyo Seco, Salinas River, Santa Rosa Creek and Santa Ynez watersheds. We recommend that development and analysis of data include duration/turbidity value relationships. Moreover, it may be helpful to analyze the relationship between turbidity levels and suspended sediment concentrations. As with temperature, we also recommend development of a specific water quality objective for turbidity that will account for both acute and chronic affects of turbidity for protection of the most sensitive beneficial uses.

D. Bacteria assessments

In 2006, EPA added several coastal beaches to California's 303d list based on our review of available monitoring data; these impairments were identified due to "indicator bacteria." In this listing cycle, Regional Board staff have assessed more recent data and produced specific listing decisions for each indicator; e.g., *enterococcus*, fecal and total coliform. First, we believe this sort of analysis is best performed during the initial TMDL development, as recommended in the State's Impaired Waters Guidance (2005) and should not be part of the 303d process. Second, we recognize that staff have used a static 30-day mean concentration to evaluate the geomean water quality objective, whereas we utilized a rolling geomean ("at least five weekly samples during any 30-day sampling period"), either is acceptable. Third, we are pleased to see the single sample maximum results were included as part of the comprehensive assessment. However, it appears staff confined their analysis to only the last two years of available monitoring results and we strongly recommend assessment of three consecutive years minimum for beach monitoring results.

Most importantly, EPA disagrees with the application of the binomial approach (within the State's Listing Policy) to assessment methods for the geomean criterion for pathogens. The

geomean represents a 30-day exposure period and thus a single geomean exceedence represents undesirable and prolonged exposure to elevated pathogen levels for recreating swimmers and waders. [It is analogous to a monthly mean concentration, often used for compliance.] For example, Stillwater Cove Beach appears to have 8 of 81 geomean exceedences of enterococcus between 2001 and 2004, and 2 of 15 similar exceedences between 2005 and 2006. EPA disagrees with the staff conclusion to delist this waterbody. We find similar coastal beaches (Capitola, Goleta, Haskell's, Leadbetter, Pismo and Rio Del Mar) may have been inappropriately omitted from the draft 303d list. Upon receipt of the State's final 2008 list, we will perform an independent evaluation of these waters to determine if these are impaired according to federal listing guidance and warrant addition to the State's list.

In conclusion, we support the vast majority of the proposed 303d listing decisions. We would like to work with your staff to resolve the outstanding concerns discussed in this letter and move toward a fully approvable Section 303(d) list. If you have any questions concerning our comments, please call me at (415) 972-3448 or Dave Guiliano at (415) 947-4133.

Sincerely,

Peter Kozelka
Water Division,
303(d)/TMDL coordinator